Amendment

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A multicolor particle analyzer including:

a capillary;

means for projecting a light beam through said capillary to illuminate a predetermined volume in said capillary;

means for causing a sample containing sample particles which naturally fluoresce or are tagged to fluoresce and emit light at one or more distinct wavelengths to flow along the capillary through said predetermined volume;

a tunable filter for receiving said light emitted by each particle and repetitively [[pass]] passing light pulses for each wavelength of light emitted by each particle as it passes through said predetermined volume; and

a detector for detecting the output light from said ~~acoustic-optic~~ tunable filter and ~~provide~~ providing an output pulse for each light pulse at each of said multiple wavelengths.

Claim 2 (original): A multicolor particle analyzer as in claim 1 in which the tunable filter is an acousto-optic filter.

Claim 3 (original): A multicolor particle analyzer as in claims 1 or 2 including a detector for detecting light scattered by said particles as they travel through the predetermined volume.

Claim 4 (currently amended): A multicolor particle analyzer for analyzing particles each of which emits light at multiple distinct wavelengths as they pass through an analyzing volume comprising:

a tunable filter for receiving the emitted light and repetitively [[pass]] passing light at said distinct wavelength as said particles pass through the analyzing volume; and

a single detector for receiving the light from the tunable filter and ~~provide~~ providing output signals for each distinct wavelength as the particle passes through the analyzing volume.

Claim 5 (currently amended): [[The]] A method of analyzing particles each of which fluoresces and [[emit]] emits light at multiple different distinct wavelengths responsive to excitation light which comprises the steps of:

causing the particles to flow through an analyzing region;

applying excitation light to the analyzing region to cause each particle to emit light at its distinctive wavelengths as it passes through the analyzing region;

receiving the emitted light with a tunable optical filter to repetitively and sequentially pass light at each of said multiple distinct wavelengths; and

detecting the light passed by the filter with a single detector to provide output signals representative of the distinct wavelengths.

Claim 6 (original): The method of claim 5 wherein the particles are caused to flow at a rate such that the light emitted by a particle is passed by the tunable filter a number of times as the particle transits through the analyzing region.

Claim 7 (currently amended): A particle analyzer for analyzing particles in a sample fluid which fluoresce and emit light at one or more wavelengths comprising:

a capillary for receiving the sample fluid;

a pump for causing the sample fluid to flow through the capillary;

a light source for projecting a light beam through the capillary to illuminate a predetermined region along the capillary whereby singulated particles flow through the illuminated region and emit fluorescent light at the one or more wavelengths;

a tunable optical filter responsive to tuning pulses for receiving the florescent light and repetitively passing pulses of light at said one or more wavelengths as a particle passes through said region;

a detector for receiving said light pulses and provide an output signal for each of said pulses[[,]]; and[[;]]

a processor configured to receive said out signals and provide an output signal representative of the amplitude of each of said one or more fluorescent wavelengths.

Claim 8 (original): A particle analyzer as in claim 7 in which the tunable filter is an acoustic-optic filter.

Claim 9 (currently amended): [[The]] A method of analyzing particles in a fluid which fluoresce at one or more wavelengths comprising the steps of:

causing the fluid to flow past a source of illumination whereby particles emit fluorescent light at the one or more wavelengths

periodically detecting the emitted characteristic fluorescence of said particles as the flow through the illumination source; and

providing output signals representative of the characteristic wavelength of each of said particles.

Claim 10 (original): A method as in claim 9 in which the characteristic fluorescence is detected by periodically passing the emitted light at each characteristic wavelengths through a filter and detecting the passed emitted light.